

IN THE CLAIMS:

Claims 1-15, 17-27, and 29-36 have been amended herein. All of the pending claims 1 through 36 are presented below. This listing of claims will replace all prior versions and listings in the application. Please enter these claims as amended.

1. (Currently Amended) A semiconductor device assembly, comprising:
a semiconductor die having a plurality of bond pads on an active surface thereof;
a dielectric film having at least one conductive trace disposed upon a surface thereof and at least one conductive via formed through therethrough;
an electrically conductive layer disposed between the active surface of the semiconductor die and the dielectric film and operably coupled to the at least one conductive via, the electrically conductive layer comprising at least one electrical current isolation slot formed therethrough and a surface providing at least one electrical conductor landing area; and
a plurality of electrical conductors, wherein at least one of the plurality of electrical conductors operably couples at least one bond pad to the at least one electrical conductor landing area and at least one other electrical conductor operably couples at least one other bond pad to the at least one conductive trace.
2. (Currently Amended) The semiconductor device assembly of claim 1, further comprising:
a plurality of discrete conductive elements disposed upon the surface of the dielectric film bearing the at least one conductive trace wherein:
at least one of the plurality of discrete conductive elements is operably coupled to the at least one conductive trace; and
at least one additional discrete conductive element is operably coupled to the at least one conductive via.
3. (Currently Amended) The semiconductor device assembly of ~~Claim~~ claim 1, wherein the electrically conductive layer includes metal.

4. (Currently Amended) The semiconductor device assembly of ~~Claim~~ claim 1, wherein the electrically conductive layer is thermally conductive.

5. (Currently Amended) The semiconductor device assembly of ~~Claim~~ claim 1, wherein the electrically conductive layer provides physical support against torsion and bending of the semiconductor device assembly.

6. (Currently Amended) The semiconductor device assembly of ~~Claim~~ claim 1, wherein the electrically conductive layer is configured to be operably coupled to a voltage source selected from the group consisting of a ground voltage reference, a power voltage reference, and an intermediate voltage reference.

7. (Currently Amended) The semiconductor device assembly of ~~Claim~~ claim 1, wherein the at least one electrical current isolation slot substantially segments the electrically conductive layer into at least two segments wherein high frequency noise present on a voltage source in a first segment of the at least two segments may be substantially isolated from the voltage source in another segment of the at least two segments.

8. (Currently Amended) The semiconductor device assembly of ~~Claim~~ claim 1, further comprising;
a longitudinal slot formed through the electrically conductive layer; and
a longitudinal slot formed through the dielectric film having a slot width wider than the longitudinal slot in the electrically conductive layer such that the at least one electrical conductor landing area is exposed through the longitudinal slot in the dielectric film.

9. (Currently Amended) The semiconductor device assembly of ~~Claim~~ claim 8, wherein the at least one electrical current isolation slot extends from proximate the longitudinal slot formed through the electrically conductive layer to proximate a lateral peripheral edge of the electrically conductive layer.

10. (Currently Amended) The semiconductor device assembly of ~~Claim~~ claim 8, wherein the at least one electrical current isolation slot extends from and is contiguous with the longitudinal slot formed through the electrically conductive layer to proximate a lateral peripheral edge of the electrically conductive layer.

11. (Currently Amended) The semiconductor device assembly of ~~Claim~~ claim 8, wherein the at least one electrical current isolation slot intersects and extends from a lateral peripheral edge of the electrically conductive layer to proximate the longitudinal slot formed in the electrically conductive layer.

12. (Currently Amended) The semiconductor device assembly of ~~Claim~~ claim 1, wherein the dielectric film further comprises a multi-multilayer film having at least one additional layer of conductive traces, at least one additional dielectric layer and at least one interlayer conductive via effecting connection between the at least one conductive trace and a conductive trace of the at least one additional layer of conductive traces.

13. (Currently Amended) The semiconductor device assembly of ~~Claim~~ claim 1, wherein the electrically conductive layer is adhered to the semiconductor die with a thermally conductive dielectric adhesive layer.

14. (Currently Amended) The semiconductor package of ~~Claim~~ claim 13, wherein the thermally conductive dielectric adhesive layer is selected from the group consisting of thermoset adhesives, thermoplastic adhesives, and adhesive tape.

15. (Currently Amended) The semiconductor device assembly of ~~Claim~~ claim 1, further comprising a dielectric encapsulant forming a protective structure over the plurality of bond pads and the plurality of electrical conductors.

16. (Original) A package substrate, comprising:
a dielectric film having at least one conductive trace disposed upon a top surface thereof and at
least one conductive via formed therethrough; and
an electrically conductive layer adhered to the dielectric film and operably coupled to the at least
one conductive via, the electrically conductive layer comprising at least one electrical
current isolation slot formed therethrough and a surface providing at least one
electrical conductor landing area.

17. (Currently Amended) The package substrate of Claim claim 16, further
comprising; comprising:
a plurality of discrete conductive elements disposed upon the the top surface of the dielectric film
bearing the at least one conductive trace trace, wherein; wherein:
at least one of the plurality of discrete conductive elements is operably coupled to the at
least one conductive trace; and
at least one additional discrete conductive element of the plurality is operably coupled to
the at least one conductive via.

18. (Currently Amended) The package substrate of Claim claim 16, wherein the
electrically conductive layer includes metal.

19. (Currently Amended) The package substrate of Claim claim 16, wherein the
electrically conductive layer is thermally conductive.

20. (Currently Amended) The package substrate of Claim claim 16, wherein the
electrically conductive layer provides physical support against torsion and bending of the
package substrate.

21. (Currently Amended) The package substrate of Claim claim 16, wherein the
electrically conductive layer is configured to be operably coupled to a voltage source selected

from the group consisting of a ground voltage reference, a power voltage reference, and an intermediate voltage reference.

22. (Currently Amended) The package substrate of Claim claim 16, wherein the at least one electrical current isolation slot substantially segments the electrically conductive layer into at least two segments wherein high frequency noise present on a voltage source in a first segment of the at least two segments may be substantially isolated from the voltage source in another segment of the at least two segments.

23. (Currently Amended) The package substrate of Claim claim 16, further comprising;

a longitudinal slot formed through the electrically conductive layer; and
a longitudinal slot formed through the dielectric film having a slot width wider than the longitudinal slot in the electrically conductive layer such that the at least one electrical conductor landing area is exposed through the longitudinal slot in the dielectric film.

24. (Currently Amended) The package substrate of Claim claim 23, wherein the at least one electrical current isolation slot extends from proximate the longitudinal slot formed through the electrically conductive layer to proximate a lateral peripheral edge of the electrically conductive layer.

25. (Currently Amended) The package substrate of Claim claim 23, wherein the at least one electrical current isolation slot extends from and is contiguous with the longitudinal slot formed through the electrically conductive layer to proximate a lateral peripheral edge of the electrically conductive layer.

26. (Currently Amended) The package substrate of Claim claim 23, wherein the at least one electrical current isolation slot intersects and extends from a lateral peripheral edge of

the electrically conductive layer to proximate the longitudinal slot formed through the electrically conductive layer.

27. (Currently Amended) The package substrate of Claim claim 16, wherein the dielectric film further comprises a multi-multilayer film having at least one additional layer of conductive traces, at least one additional dielectric layer and at least one interlayer conductive via effecting connection between the at least one conductive trace and a conductive trace of the at least one additional layer of conductive traces.

28. (Original) A method of making a semiconductor device assembly comprising: forming at least one electrical current isolation slot in an electrically conductive layer; and adhering the electrically conductive layer to a dielectric film bearing at least one conductive trace and at least one conductive via therethrough such that the at least one conductive via operably couples to the electrically conductive layer.

29. (Currently Amended) The method of claim 28, further comprising; locating a plurality of discrete conductive elements on a surface of the dielectric film such that at least one of the plurality of discrete conductive elements operably couples to the at least one conductive trace and at least one other of the plurality of discrete conductive element elements operably couples to the at least one conductive via.

30. (Currently Amended) The method of Claim claim 28, further comprising: attaching a semiconductor die having a plurality of bond pads on an active surface thereof to a surface of the electrically conductive layer with a thermally conductive dielectric adhesive layer.

31. (Currently Amended) The method of Claim claim 30, further comprising: providing a plurality of electrical conductors to the semiconductor die to operably couple at least one of the plurality of electrical conductors between at least one of the plurality of bond

pads and the electrically conductive layer and at least one other electrical conductor between at least one other bond pad and the at least one conductive trace.

32. (Currently Amended) The method of ~~Claim~~ claim 31, further comprising; forming a longitudinal slot through the electrically conductive layer; and forming a longitudinal slot through the dielectric film; and wherein the plurality of electrical conductors are operably coupled through the longitudinal slot through the conductive layer and the longitudinal slot through the dielectric film.

33. (Currently Amended) The method of ~~Claim~~ claim 31, further comprising dielectrically encapsulating the plurality of electrical conductors and the plurality of bond pads.

34. (Currently Amended) The method of ~~Claim~~ claim 28, further comprising; singulating the semiconductor device assembly from a strip comprising a plurality semiconductor device assemblies.

35. (Currently Amended) The method of ~~Claim~~ claim 34, wherein singulating the semiconductor device assembly is selected from the group consisting of sawing, punching, and laser ablation.

36. (Currently Amended) The method of ~~Claim~~ claim 28, wherein adhering the electrically conductive layer is achieved using a thermally conductive dielectric adhesive.